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# 1.Overall description

An overview of the system is given in this section. The basic functionalities, simple interactions between the system and the different type of users and between the system and other external systems.

## Product

This application

* Users can know the promotions in groceries around them
* Users can see what recipes they will be able to cook /create for with a certain amount and given the promotions in groceries
* Users can create an account and keep some information like their preferences in terms of food

Different parts of the system:

* Server for the recipes of

## 1.2 Product functions and users

The users will be able to give their location and see the promotions in store given certain filters and objectives.

The users will be able to see recipes that they can make with the products they have and those they can buy

The grocery owners can use the application to update the database of its grocery. They use the application to give special promotions to certain clients, show every new promotion they have.

## Constraints

The system uses a GPS component of the users’ phone, this makes the system dependent on that component.

The system must have an internet connection to take the information necessary for to update every database and to make search according to the criteria given by users.

# 2. Specific requirements

This section describes how the system can be used.

## 2.1 Non-functional requirements

## 2.2 Functional requirements

The basic interaction of the system with its users and other systems.

### 2.2.1 User Class 1 – The user

#### 2.2.1.1 User registration

If the user is not registered yet, the user must create an account by giving a username and a password and an email address.

#### 2.2.1.2 User login

If the user already has an account, the user can log in.

#### 2.2.1.3 User add/modify/delete preferences

If the user is logged in, the user can add its preference. For example, the type of food that the user likes, the grocery the user prefers to go to, its preferred alimentation (vegetarian, Indian food, etc.)

#### 2.2.1.4 User can make a search

If the user is already logged in, the user can make a search with different filters in place.

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#### 2.2.1.5 User can retrieve password

If the user has forgotten its username or password, the user can get a link at its email address to retrieve the information.

### 2.2.1.6 User can delete its account

### 2.2.2 User Class 2– Grocery Owner

#### 2.2.2.1 Grocery owner registration

The grocery owners can create an account with the same registration process of the user

#### 2.2.2.2 Grocery Owner login

If a grocery owner has an account, the grocery owner can log in.

#### 2.2.2.3 Grocery owner add/modify/delete products

The product owner can add a new product, modify for example the price of an existing product, or delete an existing product

#### 2.2.2.4 Grocery owner add/modify/delete promotions

The grocery owner can advertise new promotions, modify or delete existing promotions.

#### 2.2.2.5 Grocery owner

## 2.2.3 User Class 3 - Administrator

# 3. User Stories

## 3.1 Class user

As a user, I can create an account and log in when my account is created

As a user, I can edit my preferences

As a user, I can make a search for products, stores, recipes or discount

As a user, I can decide to delete my account

## 3.2 System

The system will keep all past searches made by a user

The system will send to a database the profile information concerning a user

The system will look in a database for recommendations for a user

The system will create a list of stores/groceries with interesting discounts for a user

The system will periodically scan / scrap the internet to give up to date information to users

# 4. Scenarios

## 4.1 Registration

*Preconditions: None*

*Post-conditions: User has created its profile*

User selects the “register”

System give a webpage for user to enter user’s information

User enters its information to create an account

Account Server create a profile for the user and send the profile to the Profile Database

## 4.2 Login

*Preconditions: user has already created an account*

*Post-conditions: user has successfully logged in*

User enters its password, username and selects the “sign in”

System communicates with Profile Server to look for the user profile

Profile Server confirms the user credentials are good

System give the user its home page

### 4.2.1 Login exception: error

*Preconditions: None*

*Post-conditions: system refuses login*

User enters its password, username and selects the “sign in”

System communicates with Profile Server to look for the user profile

Profile Server doesn’t recognise the user credentials

System refuse access to user and let the user retry

## 4.3 Search

*Preconditions: User is already logged in*

*Post-conditions: User receive a list of items*

User enters some filter and send a search

System receive the search and communicates with Search module and optimization module.

System send a list of items to the user

## 4.4 Recommendation